

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Claims 25-29, 31-33 and 37 are currently being canceled.

Claims 1 and 34-36 are currently being amended. Support for the amendments made to claim 1 may be found, for example, on page 31 of the specification.

Claims 38-40 are currently being added. Support for new claims 38 and 39 may be found, for example, on page 31 of the specification. Support for new claim 40 may be found, for example, on page 16 of the specification.

This amendment adds, cancels and amends claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After adding, canceling and amending the claims as set forth above, claims 1-5, 8-24, 34-36 and 38-40 are now pending in this application.

Claim Rejections – Prior Art:

Presently pending independent claim 1 has been amended to recite that the array of two or more sensors includes an activating unit configured to activate only one of said two or more sensors at any point in time, in order to reduce power consumption of the apparatus. No such feature is taught or suggested by either Jacobsen et al. or by Kovacs et al.

Accordingly, claim 1, as well as claims 2-5, 8-24 and 34-36, which depend either directly or indirectly from claim 1, are patentable over the cited art of record.

Additionally, dependent claim 36 is patentable over the cited art of record. In its rejection of claim 36 as made on page 5 of the Office Action, it asserts that “Jacobsen et al. disclose a wakeup circuitry coupled to the power module and configured to activate the two or more sensors at periodic time, and to turn off the two of [sic] more sensors at all other times (col. 16, lines 29-34).” Claim 36 has been amended to more clearly distinguish over these teachings of Jacobsen et al., whereby claim 36 now recites wakeup circuitry coupled to the power module and configured to activate the two or more sensors at periodic intervals,

and to turn off the two of more sensors at all other times between adjacent ones of the periodic intervals. Column 16, lines 29-34 of Jacobsen et al. discloses that a micro-computer 650 activates an appropriate sensor or sensor via a transceiver 660 and antenna 664, when information is desired by a command unit. This ‘information on demand’ as disclosed by Jacobsen et al. does not correspond to the claimed features of requesting information from sensors at periodic intervals (e.g., every ten seconds, or every minute). Accordingly, claim 36 is patentable over the cited art of record for these additional reasons, beyond the reasons given above for its base claim 1.

New Claims:

New claims 38-40 have been added to recite additional features of the present invention that are believed to provide a separate basis of patentability for these claims. For example, claim 38 recites that the activating unit comprises:

at least one shift register for selectively accessing one of the two or more sensors;

decoding circuitry for decoding an output of the at least one shift register;

a switch for receiving the decoded outputs of the decoding circuitry, and for toggling a current based on the decoded outputs; and

a resistive sensor element for receiving the toggled current, wherein the toggled current is utilized to access only one of the two or more sensors at any point in time.

Such features as recited in claim 38 are not taught or suggested by the cited art of record.

New claim 39 recites that a controlling unit that is configured to control the processing module to cause the processing module to read out the signals from the two or more sensors in a particular sequential order, so as to prioritize certain sensors of the two or more sensors with respect to other sensors of the two or more sensors. These features are also not taught or suggested by the cited art of record.

New claim 40 recites that the apparatus is maintained in a lower-power-consumption ON mode during the all other times between the adjacent ones of the periodic intervals. In the system of Kovacs, it appears that the device is turned completely off at times other than when the device is controlled to be turned on, whereby the present invention maintains the apparatus in a low-power-consumption mode so that it can quickly perform its sensing without having to wait for components of the sensor system to power-up.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicants believe that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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